



Saint Louis Audubon

Bulletin

Volume 41, Number 7

Fall, 1975

S O A R
S A V E O U R A M E R I C A N R A P T O R S

This exciting new project of the St. Louis Audubon Society was undertaken when the Board of Directors approved a grant-in-aid to Dr. William H. Halliwell, Associate Professor of Veterinary Pathology at the University of Missouri, Columbia. The grant, renewable for two more years, is in support of Dr. Halliwell's medical assistance program for injured birds of prey. It is also intended that these funds assist in the establishment of a breeding program for native bald and golden eagles at the University.

Dr. Halliwell is well qualified to receive this Audubon grant, having received his doctorate in pathology from the University of Missouri. Prior to his present position he practiced in North Carolina, served in the U. S. Air Force Veterinary Corps, and was Assistant Professor of Life Sciences at the Air Force Academy.

All of the birds treated in the program are protected by law and are beneficial to man. Several are endangered species. The St. Louis Audubon Society and others involved with wildlife protection and preservation are concerned that of the 45 birds treated so far in the program, 26 (58%) were suffering from gunshot wounds. Others were injured by insecticides or other poisons.

Among the birds of prey assisted to date were 15 bald eagles, 9 golden eagles, several species of hawks, falcons and owls, and an osprey. Thirteen of these were able to be returned to the wild; and others survived, crippled, but available for the University's breeding program or for zoos.

The Audubon Society hopes that sportsmen and the public generally will report injured birds of prey so that they can be taken to Columbia for Dr. Halliwell's program of assistance. Injured birds of prey may be reported to the St. Louis Audubon Society at 771-2731, the Missouri Conservation Commission at 726-6800, the U. S. Fish and Wildlife Service at 723-0810, or the Animal Protective Association of Missouri at 645-4610 or 647-1111.

On Friday night, October 3, Dr. Halliwell gave an illustrated lecture to the general membership at the Ethical Society. He showed an excellent film on falconry taken at the Air Force Academy, as well as a goodly number of slides showing some of his patients. His talk was well received by the approximately 250 persons in attendance, and the great number of questions after the formal presentation showed a high degree of interest in this project.

After the lecture, there was a social hour featuring refreshments provided by the Gary Giessows and the showing of Martin Schweig's pet golden eagle. About \$120 in donations for Soar were contributed that night.

POSSIBLE, PROBABLE, OR CONFIRMED

Mary C. Wiese

For the last two years I have had the pleasure of assisting with the Massachusetts Breeding Bird Census in a 'block' north of Greenfield. A friend, Dorothy Hunter, whom we visit annually for the first two weeks in July, is participating in this four-year project run jointly by the Massachusetts Audubon Society and the State Department of Fish and Wildlife. At the end of the four years, a Breeding Bird Atlas for Massachusetts will be published.

This is a far broader survey than the nationwide census with which a few of us have been involved locally. Instead of driving an assigned area and recording all birds seen or heard at regularly repeated intervals, one must cover a small 'block' as often as possible during the four months from May through August. Breeding is considered under three categories: Possible, Probable, and Confirmed.

There are a number of check points under each of these headings. For example, one entry under Possible is, "bird seen during breeding season." Under Probable would come, "singing male observed at same location on several occasions." Under Confirmed, "nest building observed" or, "bird feeding young."

Although Dorothy and I are dedicated birders and have covered this same beautiful Green River Valley and surrounding hillsides for twenty years, this project has added immeasurably to our pleasure and made us see things we might have passed by previously. For example, we might merely have noticed that there was a killdeer in the pasture by the Colrain Road — and let it go at that. Instead, we had the delight of watching the three precocial babies progress daily from fuzzy animated

billiard-balls on legs to four inch miniatures of Ma, calling, after a week, 'dee-eep,' in answer to her call. We assumed it was Ma; in any case there was only one adult with them, never feeding them, but keeping them close together in a marshy area near the road.

Nor probably would we have discovered the robin's nest in a beech arching over from one side of the dirt road, and the red-eyed vireo's nest close by in another beech on the other side. We had stopped at this spot because of a singing black-throated blue warbler, and after 'pishing,' called out a worried junco and an equally agitated solitary vireo. The robins ignored us (as robins usually do) but the red-eye's singing and movement led us to look up to see the two nests. Incidentally, I had always questioned the statement that the red-eyed vireo is the "most abundant bird in eastern deciduous forests," (Robbins) but now I'm a believer. We never 'pished' at a woods edge without seeing or hearing at least one, and usually a pair.

Of actual nests we discovered five in trees: kingbird, wood thrush, robin, red-eyed vireo, and scarlet tanager. Last year, by sheer happy accident, we found the beautiful ground nests of an ovenbird, a junco, and a white-throated sparrow. We've seen barn swallows and phoebe's nesting under eaves, and had the pleasure of watching five phoebe babies fly safely from the nest on the Hunters' porch after at least twelve days of frantic parental activity. They fed them from before 6 am until nearly 9 pm in the long northern daylight.

Sapsuckers raised one baby safely in a hole high in a dead tree near the river. The small opening was completely blocked by the fuzzy baby's body for the last few days before he flew. Any sibling would have had no chance at being fed. Flickers were also successful at nests in several locations surprisingly close to the ground. And bluebirds seem to be increasing markedly in the area. Several years ago we were lucky to see any bluebirds at all. This year we discovered pairs or families in a number of locations.

All the nestings didn't end so happily. A small bird pursued by a much larger bird turned out to be a chestnut-sided warbler with a gawky cow bird as its demanding offspring. We found the wood thrushes' nest because the parents were churring frantically as a blue jay took the tiny babies.

Those ill-advised robins over the road had the saddest end of all. We had watched Pa trying to stuff a small frog down each baby's throat—and haul it back out again. He finally took it to the road below, battered it into edibility, and ended by choking it down himself. Right then we decided the parents weren't too bright, and when we went back the next day our fears were confirmed. There had been a storm overnight and the precariously located nest was down on the road, the babies nearby, thoroughly dead, and flattened by passing cars.

Dorothy will continue with this project all summer—and in fact can check in autumn for "definitely identifiable nests," revealed after the leaves fall. However, the tenth of July, the day before we left, was obviously Baby Bird Day. We saw twenty different parent-child combinations including bobolinks, white-breasted nuthatches, rose-breasted grosbeaks, and the poor hoodwinked chestnut-sided warbler. On the total list of possible, probable and confirmed nestings are nearly eighty species, including the black ducks and green heron which we didn't find again this year. Once a species is confirmed it's not necessary to re-confirm it another year. However, Nashville warbler (fifteen warbler species in all), killdeer, and Savannah sparrow were additions this year.

I'm particularly pleased about the Savannah sparrow since I think we wouldn't have bothered with its thin song from high in a tree had it not been for the census. We couldn't find the bird, but it had to be a sparrow despite the surprising location. After checking we realized that Peterson's "tsit-tsit-tsit, tsee-tsaay (last note lower)" was exactly what we were hearing. Another day we discovered the bird on the ground, and finally we saw him singing where we would have expected him, on a fence post near the field where we hoped his mate was busy with a nest.

* * * * *

Question: Couldn't we in Missouri, or at least in the St. Louis area, undertake a similar project? I've tried to indicate some of the rewards but I'm not volunteering to organize the effort. It has to be granted that Massachusetts is a small state populated by an inordinately large number of avid birders, and that the Massachusetts Audubon Society is highly organized with a paid staff and many resources which we lack. Some of us met Deborah Howard, who is in charge of the project, when she was in St. Louis last May. We could undoubtedly call on her for help. Even if we couldn't do it on the same intensive scale, we might enlist the cooperation of the Missouri Department of Conservation and do it on a partial basis.

Any takers?



AUDUBON WILDLIFE FILMS

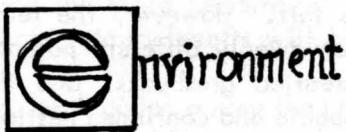
1975-76 WILDLIFE FILM SERIES

The Saint Louis Audubon Society and the National Audubon Society will again offer the Wildlife Film Series free of charge to the general public. The first film, EAST SIDE STORY: BAHAMAS TO QUEBEC, will be presented by Walter Berlet on Friday, November 7th at the Ethical Society of St. Louis, 9001 Clayton Road, at 8:15 p.m.

Color and composition — an undefinable sense of the aesthetic — are the basics of his fine motion picture photography. Mr. Berlet enlarges and enhances the natural beauty of the plant and animal world with his camera. Using special cameras and lenses in order to magnify and penetrate nature he succeeds in documenting the incredible beauty of a world too often passed over. In filming the EAST SIDE STORY: BAHAMAS TO QUEBEC the Berlets follow the eastern sun northward from early spring to late summer. This is a film tribute to the East Coast of North America and one not to miss.

of the environment. This is the first issue of the new environmental magazine, *Focus on the Environment*, which will be published monthly. It will feature news and information on environmental issues, as well as articles on how to live a more ecologically sound life.

Focus on the



BETTY WILSON



MISSOURI TAKES A GIANT STEP BACKWARDS ON SOLID WASTE MANAGEMENT

In 1972, Missouri was hailed as a state with a model law for the management of solid waste! By 1974, before the law had had a chance to prove itself, powerful interests nearly achieved weakening of the law. In 1975, SCS for SB98 was introduced and provided some compromise with the trash haulers. It was hoped by groups interested in an effective state program that the provisions of SCS SB98 would disarm the opposition leaders and provide easier administration for local governmental units without significantly detracting from the total program. This proved to be a vain hope as amendments were considered from time to time for many weeks on the Senate floor. Broad opposition, especially from rural areas, surfaced. Votes on various amendments showed that some Senators did support an effective Solid Waste Management Program for Missouri, although this was not apparent in the final vote (see Below). After a number of devastating amendments SCS SB98 became SS SCS SB98 and passed the Senate.

In the few remaining weeks of the session, the House, under the excellent leadership of Rep. Joseph Holt, accomplished some minor improvements in the legislation. The vote in both Houses was as follows: the Senate passed the bill with 29 yes votes, 5 absent. The House passed the bill with 121 yes votes, 11 no votes, 3 present and 28 absent. The Governor signed the bill on July 30, 1975. Many persons, including the League of Women Voters, urged the Governor to veto the final bill but were unsuccessful.

Substantial changes in Missouri's Solid Waste Law went into effect September 28. They include:

1. Cities and counties operating a solid waste program will not be required to operate the collection or disposal service or to collect service charges. The General Assembly can rescind any rule or regulation dealing with solid waste by a regulation passed by both Houses.
2. Certain cities and counties are exempted from the requirements to provide for solid waste materials collection and disposal and to submit a solid waste management plan. This exempts all Missouri counties except St. Louis, Clay and Jackson from these requirements. It also exempts all cities with less than 500 population in the 111 exempted counties. (Half of Missouri's cities!)

The 1972 law required all cities and counties in the state to provide for collection and disposal of wastes within their boundaries and to submit solid waste management plans to the Department of Natural Resources (DNR) by June 30, 1974. The revised deadline for required plans is January 1, 1976.

3. Provision for solid waste collection and disposal plans are to be submitted by St. Louis, Clay and Jackson Counties; all cities in these three counties, and cities with a population of more than 500 in the other 111 counties. These non-exempt cities and counties are not required to operate or contract for the operation of collection, transportation or disposal services, as long as adequate private services are available and are being used. However, they can be required to operate or contract for operation of these services if the department holds a public hearing and determines that privately operated services are not available or that use of or failure to use such private services has resulted in a substantial public health hazard or public nuisance.

In an opinion issued by the Missouri Attorney General under the previous law, the city or county was held responsible for billing individuals for collection and disposal services, even if provided by a private hauler, and the private hauler could not bill individuals directly. Under the revised law, the hauler can bill the customer directly for his services. The hauler cannot force payment of his service charge if an individual does not want the service. If a city or county itself assesses a service charge for solid waste collection and puts the service charge, the utility services cannot be terminated for failure to pay the solid waste service charge.

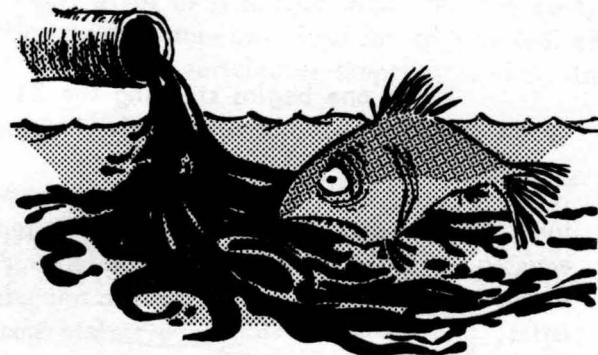
4. Any exempted city or county which wishes to carry out a solid waste program must first hold a public hearing.
5. DNR may bring a lawsuit for civil penalties in addition to the injunctive relief available under the preceding law.
6. County courts may now enforce regulations, standards or orders adopted regarding solid waste management, through a suit for injunctive relief penalties.

Provisions of the law that require a permit to operate a solid waste processing facility or disposal area and those prohibiting dumping or depositing solid waste other than at an approved processing facility or disposal area were not affected by the revised law. Rules and regulations governing the issuance of permits and the construction, design and operation of processing facilities and disposal areas remain unchanged.

The Missouri solid waste management program, as amended, puts pressure on the local governments if there are to be accomplishments. The state no longer has mandatory powers.

Here is some good news! Since the passage of the 1972 law, 30 county plans have been received, 250 cities have put solid waste management plans into effect, and 270 cities have had their plans approved. Since 1972, 270 dumps have been closed and the state expects to close 170 more this year.

HEARINGS MISSOURI CLEAN WATER COMMISSION
 Betty Wilson - Chairman



PROGRESS? ? ? ?

The Missouri Clean Water Commission will hold a hearing on an appeal of permit conditions by N L Industries, Inc., and the second in a series of informational hearings in St. Louis in November. The appeal hearing will be held at 8:00 p.m. November 19, and the informational hearing at 8:00 p.m. November 20. At 10:00 a.m. on November 20, the Missouri Clean Water Commission will have a meeting. All these events will take place at the Rodeway Inn, 10232 Natural Bridge Road.

N L Industries, a St. Louis firm, is appealing the conditions of its National Pollutant Discharge Elimination System (NPDES) permit. Background information on the permit appeal will be available prior to the hearing. For copies of the information, contact the Missouri Department of Natural Resources, Water Quality Program, P.O. Box 1368, Jefferson City, Mo. 65101.

The informational hearing is being held to receive public input on two specific issues, Jim Odendahl, commission director of staff, said.

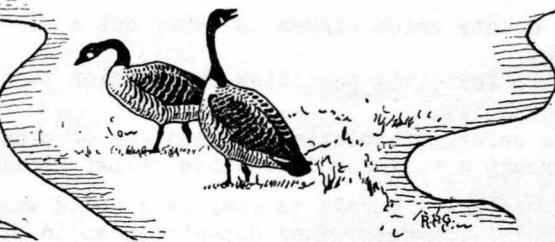
"Firstly, we want to address the question of providing state grants to match federal grants for wastewater treatment construction projects. At the rate federal grant allocations are now being made to the states, if we continue to provide our 15 percent matching state grant, we'll use up Missouri's \$150 million bond issue, which was approved by the voters in 1971, within three years. The commission would like to get the public's opinion on whether we should adopt bond issue, Reduce the percentage of the state grant or discontinue state grants altogether when the bond issue expires."

The second question the commission wishes to address concerns large secondary treatment plants on the Missouri and lower Mississippi rivers. "Construction of these plants will require more than \$100 million per plant," Odendahl said; If we fund all these projects we'll use all of Missouri's federal grant allocation for about three years. We want to know if the public thinks we should seek separate federal funding for these projects, fund all the projects at the same time or fund one project to completion before starting the next project."

The commission also will provide an opportunity for discussion of other issues of interest to the local public. Similar informational hearings will be held in the coming months in St. Joseph, Springfield, Hannibal and Cape Girardeau. The first hearing was held in Jefferson City.

ALL INTERESTED PERSONS IN THE ST. LOUIS AREA ARE ENCOURAGED TO ATTEND

ANNUAL CHRISTMAS BIRD COUNT



ST. LOUIS AUDUBON SOCIETY ANNUAL CHRISTMAS CENSUS

Sunday, December 21st. Meet at Boschertown, Highways 94 and B at 8:00 a.m.

Richard Anderson, coordinator. For details call 868-2009.

PAEODOGENIC AND NEOTENIC MISSOURI SALAMANDERS

Tom R. Johnson

When one begins studying the 24 varieties of salamanders found in our state, it soon becomes apparent that not all are the "typical" salamanders that live under rocks or logs.

During the evolution of these amphibians, some of the salamanders survived by retaining larval characteristics and being able to reproduce. In a "normal" condition, salamanders would lay eggs in water. The eggs would hatch out as gilled young or larvae, which would live for a time in the water — eating small aquatic animals — and then lose their gills and other larval characteristics, and change (metamorphose) into small adults. The adults would live on land or along edges of streams.

There are two conditions which apply to salamanders retaining larval characteristics. These are called paedogenesis and neoteny. Both of these conditions are found among the variety of salamanders living in Missouri.

Paedogenesis.—This Greek term can be roughly translated to mean "to give birth to a child." In other words, a paedogenic animal is capable of reproducing, but at the same time is retaining larval characteristics. However, under no circumstances can the animal lose the larval characteristics and become a land living adult form.

This condition is found in a number of our salamanders, but not all of them are totally paedogenic. That is, some retain all or nearly all characteristics, while others may be found to have only a few of them. Nonetheless, all are completely aquatic. All are genetically fixed to remain larva-like all their lives — no form of hormone, chemical, or rapid change in their aquatic world will change them.

The mudpuppy (Necturus m. maculosus), and a subspecies, the Red River waterdog (N. m. louisianensis), are examples of a paedogenic salamander. They have large, feathery gills, their eyes have no eyelids — and are thus always open, their skin is designed for survival in the water, their tail retains a high fin for swimming, and the skull and other bones retain larval features. Some of the adult characteristics are the formation of small lungs, and, of course, the maturing of sex organs.

Other Missouri salamanders which retain a number of larval characteristics, but are genetically fixed are: Western Lesser Siren (Siren intermedia nettingi), and the Oklahoma Salamander (Eurycea tynerensis).

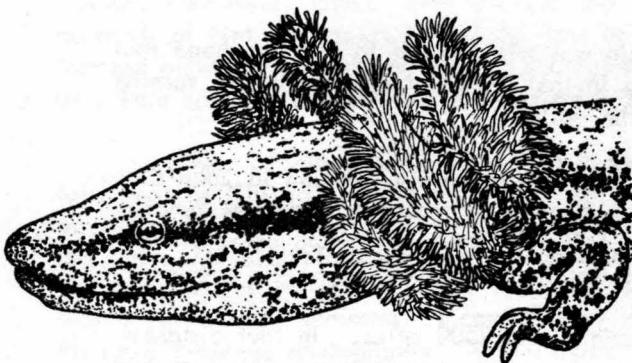
There are several more aquatic salamanders which may be classed as partially paedogenic. These salamanders have progressed somewhat, in that adults have lost the gills, have developed lungs and are able to reproduce — even though other larval characteristics are still present. Such amphibians as the hellbender (Cryptobranchus a. alleganiensis), the Ozark hellbender (C. a. bishopi), and

the three-toed congo eel (Amphiuma tridactylum), are all partially paedogenic. The hellbenders are interesting in that they have retained a primitive, fish-like method of fertilizing their eggs. All other North American salamanders fertilize their eggs inside the female. But the hellbender male releases a form of milt into the water, and over the eggs, which were laid by the female.

Neoteny.—In this condition the salamanders normally metamorphose into full adults and lose all larval features. However, due to an environmental change or a lack of iodine in their water, or other factors; the larvae develop some of the adult characteristics, but do not leave the water. Moreover, if the proper environmental requirements are met, such as adding an iodine solution to their water — the salamanders will change into a land living adult.

Missouri salamanders which have been known to occur as neotenic forms are: many-ribbed salamander (Eurycea m. multiplicata), gray-bellied salamander (E. m. griseogaster), and the grotto salamander (Typhlotriton spelaeus).

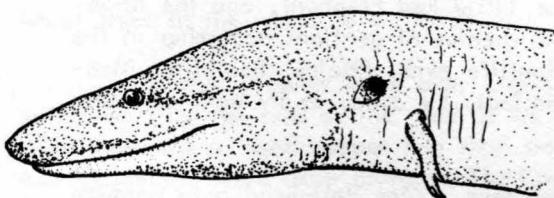
Observing the life style of these forms of salamanders gives us a unique look into the past, when fish-like amphibians began changing into forms which could venture onto land for short periods of time. Eventually, the amphibians evolved into other land living vertebrates (Reptiles) which, in turn, led to the development of birds and mammals.



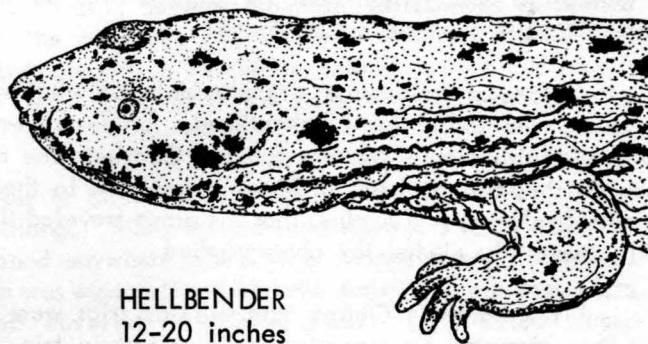
MUDPUPPY
6-12 inches
(paedogenic)



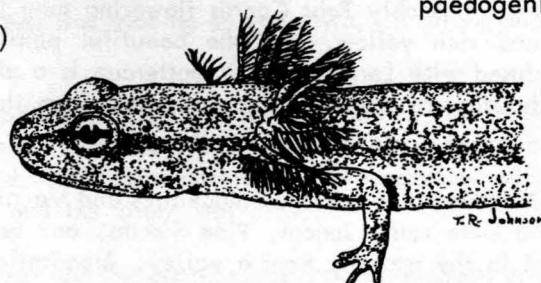
WESTERN LESSER SIREN
1-2 feet
(paedogenic)



THREE-TOED CONGO EEL
1-2½ feet
(paedogenic)



HELLBENDER
12-20 inches
(partially
paedogenic)



GRAY-BELLIED SALAMANDER
1-3/4-3-1/4 inches
(neotenic)

THE HIGH COUNTRY —
THEY CAME, THEY SAW, THEY TOOK IT BACK

by
Lee F. Mason

Fifteen representatives of the Audubon Society returned to St. Louis, Missouri, with almost four thousand photographs of the flora, fauna, and scenery of the spectacular Ouray region.

The group had selected the month of July for the Audubon Photography Tour, with the hope of finding those magnificent sweeps of Colorado Columbine in Yankee Boy Basin. However, Mother Nature still had unusually cold feet at that time, this year, and the showy Columbines were loathe to unfurl under the frosty breezes skipping off the lingering snowbanks.

July 14th, we watched snow fall across the Amphitheatre that rises east of Ouray. To us Easterners, that was an all-out incongruity! But even more astounding and thrilling to the flatlanders from St. Louis' 500-foot altitude, were the Jeep trips into the back-of-the-beyond; the reeling heights of rock rises; the awesome depths of granite gorges; the verdant velvet of the timberline meadows; the great rushes of water tumbling from dizzying heights; and everywhere in this mid-summer period snow-filled crags, white-capped mountains, and snow-blanketed tundra glistening in the sun. Along several of the Jeep trails, snowfields had been cut through, to leave a fifteen foot wall of snow the narrow roads.

July 21st, the steep road leading to Sidney Basin was still snowed in past the bend that overlooks the old town of Sneffels. As we stood drinking in that beautiful expanse before turning back, an immature Golden Eagle rode the thermals over the valley.

Although the Jeep roads to Yankee Boy Basin, Engineer Mountain, and on to Lake City were open before then, driving over the ruts was hazardous because of washouts and snow runoffs. The spectacular Black Bear drive south of Ouray leading to Telluride down a zig-zag of 13 switchbacks wasn't possible, and remained snowed in for another month.

From Northern Mexico to the Arctic Barrens of Canada is over 2500 miles. In that distance, one passes through a vast diversity of plantlife—from desert cactus and yucca, through rich pine and aspen forests, to brushy, treeless expanses toward the Arctic Circle. BUT—from Cortez (southwest of Ouray) to Mt. Wilson near Telluride is only 60 miles as the crow flies. Yet all the plants of that 2500 mile journey can be found!

Many of the showiest of Colorado's 750 wildflowers bloomed while we roamed the San Juans. However, the delightful Elephanthead, fondly known as the Little Red Elephant, and the large-flowered bluish-purple Western Fringed Gentian (one of the 20 species of gentians occurring in the Rockies) should have been in bloom somewhere in the five plantlife zones (Plains, Foothills, Mountain, Sub-alpine, and Alpine) that the group traveled through on foot, by Jeep, or by auto caravan. Both completely eluded the photographers.

We based in Ouray, and all side trips were one-day treks. One delightful auto caravan tour was repeated by request: the Elk Meadows trip. There we found the jagged San Juans rising crisply beyond sweeping meadows most profusely covered with wildflower blossoms. We counted 72 varieties the first day, beginning with a Prickly Pear Cactus flowering near Ridgway. The Sulphur Flowers were especially billowy and rich yellow, and the beautiful purple-blue Monkshood had blossoms an inch long. Often confused with Larkspurs, this Buttercup is a plant in which all parts are poisonous. It isn't all bad, though, for the drug Aconite comes from the plant and is used as a heart and nerve sedative.

Chukar Quail were in Elk Meadows. Red-winged Blackbirds and Mountain Bluebirds abounded. A Cassin's Finch was seen and there were many Juncos, Pine Siskins, and several immature Horned Larks. A Red-tailed Hawk wheeled in the updrafts from a valley. Broadtailed hummingbirds darted among the tubed flowers. For a long while, we watched a mule deer family thread its way across several openings in an aspen forest far below. On a distant outcropping, a coyote gingerly moved up a long rise of rock. Jim Olterman, Wildlife Conservation Officer at Ouray, came upon us as he was going to check on an Elk herd nearby and told us about a bear in the area.

When we caravaned out the East Dallas Road, we left our cars near the Dallas Creek Cascades and hiked up the Jeep trail to explore the heights leading into Cocan Flats. Everywhere, the wild flowers seemed at their best and the more colorful ones dominated the scene: Scarlet Gilia, Poppy Mallow, Penstemons, Lupine, Mertensia, Evening Primrose, Paintbrush, Bluebells, and along the stream banks the Globeflowers were especially lush. Most challenging to the photographers were the hanging blossoms of the Twisted Stalk and Pink Plume.

In the aspen forest near the bridge over Dallas Creek, birds flitted in and out of the trembling leaves: a Red-napped Sapsucker, Downy Woodpecker, a number of Robins, several Wrens, and half a dozen Tree Swallows. Across the road, a Canada Jay bobbed from one pine to another, a Western Tanager sat quietly on a sturdy twig protruding from a leafless shrub; a Yellow-headed Blackbird moved about in the tall grasses, and a Red-shafted flicker flew in and out of the quakies. Alongside the road, in a rockpile, a mother Marmot and her four young sat upright to see what was going on. A Pika atop a boulder at the edge of the wood was sunning itself. Some distance down the creek, a Mule Deer drew long drafts of water from the stream.

For its Ghost Town Tour, the group explored an area northeast of Silverton: Cunningham Gulch, Howardsville, Eureka, and Animas Forks. Cunningham Gulch was all abloom with Colorado Columbine. The musical chips of the Wilson's Warbler came from the willows along the creek. Later, as we followed the Animas River toward Eureka, we found even more abundant spreads of Columbine, plus dense spikes of Silky Phacelia, large-flowered Cinquefoil, white Cranesbill, Mt. Parsley, Wall-flowers, Mertensia, Phlox, and low-growing Stonecrop. Above Eureka, a veil of water dropped hundreds of feet into gorge to add its flow to the river below. Picturesque mine ruins along the route inspired artistic compositions for both photographers and artists. Scampering about the weathered timbers were several Golden-Mantled Ground Squirrels and Western Chipmunks.

When we hiked up Cascade Trail in the Cirque east above Ouray, we went as far as the upper falls and the Chief Ouray Mine. The trail is well defined and not too difficult for inexperienced mountaineers. The views of Twin Peaks and Whitehouse Mountain to the west are picture-perfect from the trail. Mount Sneffels (14,150 ft.) looms in the distance when viewed from the upper switchbacks, and many of the taller San Juans southwest of Ouray show themselves to good advantage from the higher viewpoints. Blossoms, of course, vary with the ascent, and are often too precariously located for good close-up photography. Among those most approachable were Puccoon, Paintbrush, Harebell, a brilliant blue Penstemon, Ragwort, Vetch, Alpine Daily, and Cranesbill. The bird population, too, changes as the trail rises. The day of our climb (July 19) it was quite warm and the sun was bright, so most of the feathered wild roosted quietly in the shade. Several Mountain Chickadees twitted at us, and a Swainson's Hawk spiraled gracefully in the distance. As we descended and rounded the last loop of the trail where it emerges near the campground, a Porcupine peered down at us from a tree. No doubt he was surveying just where to begin foraging in the camp to find some salt—the finest treat in the world to a "Porky."

On the caravan drive over Owl Creek Pass to Silver Jack Reservoir, we saw 32 species of wildflowers by the side of the road as we passed along. Many we had seen elsewhere also. But the Wild Rose was a much deeper hue than we had found anywhere else. The Monkeyflower, Thistles, and Goldenrod were more profuse. The Cowparsnip was especially sturdy; the Arnica at the pass extra large and brilliant, and the False Hellebore almost covered field after field. Long-tailed Black-billed Magpies, Clark's Nutcrackers and Gray Jays were the most evident of the larger birds. The tiny lesser Goldfinch and Audubon's Warbler were seen near the lake. At the pass where Owl Creek tumbles in cascades, a Dipper was bobbing up and down, its strong legs holding it securely to a rock being splashed with spray.

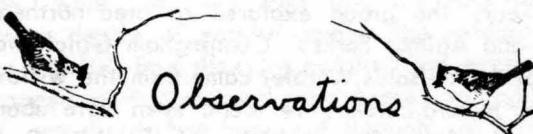
While the photographers were busy with their cameras, the artists with their sketches, Carolyn Boroughf and Edith Brune kept a record of the animals we encountered on our side trips. They have listed 45 different birds, and 11 different mammals. The number of wildflower species found soon passed the one hundred mark, and the count was dropped.

The Audubon Society and the photography tour participants are most grateful to Mr. and Mrs. Marvin Gregory, Mr. and Mrs. Werner Henze, the Women's Division of the Ouray County Chamber of Commerce and the City of Ouray.

July 15, Mr. Gregory launched the eight-day tour of the Auduboners with a presentation of his High Country photographs and historical information. Through the courtesy of the City of Ouray,

the use of the Town Hall was arranged by Mr. Gregory, and other Ouray visitors were invited to see and hear his slide show and talk. After the program, the Women's Division of the Chamber of Commerce served some much-appreciated refreshments to the audience.

Mr. Henze was an after dinner speaker for the Audubon party on Saturday, July 19. On July 21, the Henzes entertained the group at their home and studio. And on July 23, Mr. and Mrs. Henze escorted the photographers over Owl Creek Pass and on to Silver Jack Reservoir. A special treat for the artists in the Audubon group was a painting demonstration by Mr. Henze. From a vantage point above the dam, Werner chose a view that reached across the lake, toward Cimarron Ridge to the West. With a clean sheet of watercolor paper and a palette of watercolor paints, he lifted all the charm and beauty of the scene and transferred it to that rectangle of white! One of the watchers remarked, "What a marvelous rendition you've done in just a couple of hours!" "No," corrected Werner, "in 45 YEARS and a couple of hours!" There's a parallel there when it comes to outstanding photographs, too!



ST. LOUIS AREA MAY, JUNE, AND JULY BIRDING

By

J. Earl Comfort

Area birding during May, June, and July was quite conspicuous, with May, as always, the most productive and most exciting. And, as usual, there were more bird walks and more local bird trips during this month than in any other. Naturally, there were more birders afield. Of course, many of these trips were combinations featuring many phases of nature study since many local birders are expert botanists, with quite a few possessing a general knowledge concerning nature's ways and whims. Fortunately, nature walks usually open the door to a desire to assist in the conservation of our natural resources, dwindling or otherwise.

As of August first, our area composite area 1975 bird list total stood at an impressive 265 species.

The highlight of our May birding was the annual St. Louis Audubon big day "century run" count of individual species found within a 50 mile radius of the city. Connie Hath's summation of the day's count was only 155 species. No doubt this reflects the trend that shows our birds are fighting a losing battle against harmful insecticides and "progress." The 1974 big day total was much higher.

Warblers led during the 3 month period with a total of 36 kinds tabulated during May.

The local areas birded most often were the territories up and down the Mississippi River on both sides, the August A. Busch Wildlife Area in St. Charles County, the Alton Dam and Alton Lake also in St. Charles County, and the Little and Big Creve Coeur lakes in St. Louis County. St. Charles County in general was excellent birding territory. This was especially true concerning hawks and short-eared owls.

The bird of the period was a laughing gull at the Alton Dam on May 31 first spotted by Dr. Joe and Joey Eades. Later in the day many others were able to enjoy and list this extreme area rarity there.

The laughing gull was far out of its normal range, which is coastal, especially in the Southeast. This bird is a 14 inch gull, somewhat smaller than our common (in season) ring-billed species. The head of the adult is black. There is an eye ring. The wings and back are dark, the rest of the bird white. Immatures, lacking the black head, show a banded tail.

O-du-na-mis-sug-ud-we'-shi

By

Warren Lammert

The Chippewas gave this long name to the House Wren. Translated, it means "a big noise for its size." A bustling bundle of energy.

We have three Wren houses near our terrace, and each spring, the male arrives first, stakes out his territory, and drives out any claim-jumpers that might happen along.

When the female, or females appear, he goes into his courtship dance with song, quivering wings and tail flicking straight up.

I suppose ounce for ounce, they are the most energetic, toughest, singinest birds in all creation!

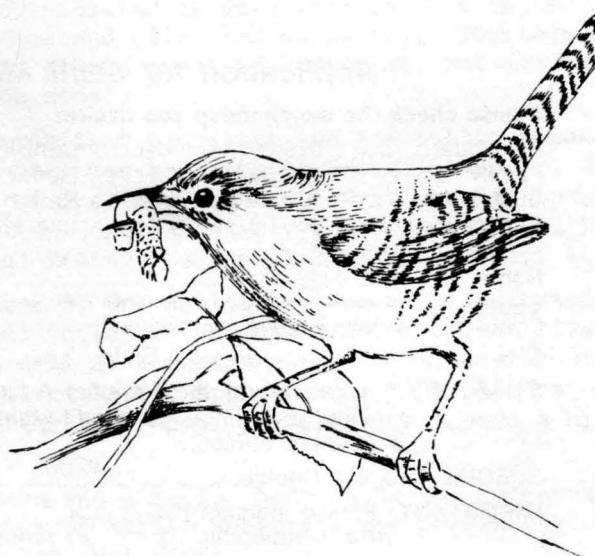
This year Henrietta saw the young the moment they started to fly. She called me, and together we watched the happiest, most amazing performance of aerial freedom we have ever seen. The joy and pleasure displayed in exploring the world around them, in experiencing life at its fullest, up and down, in and out of the trees, in sheer abandon, a delight to see. Out of the nest, a whole new life of flight, landing near us unafraid, off again, acrobatics with joy uncontaminated.

The first house hatched this brood, an old Bluebird house standing near our small woods might be filled; another Wren house is now being used, the third is waiting.

We wonder if there is more than one female, for males are sometimes philanderers. I read recently that a male House Wren was observed from 4:15 one early morning until 8 that evening, to have made some 1200 trips bringing food to his family. Sounds like a tall tale to me, yet the source is one I wouldn't doubt.

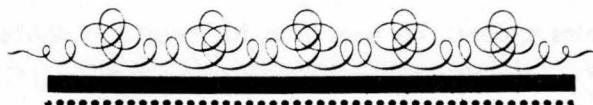
In the Fall, these birds become quite shy, leave backyard and farm, for the seclusion of the woods. Shortly after, migrate to southern Florida, or Mexico.

* * * * *



WE WON! THANKS TO YOU.....

The Saint Louis Audubon Society won the first prize of \$1,000 for the greatest numerical increase in membership (93) in the West Central Region of the National Audubon Society. Prairie Audubon Society (Nebraska) won first prize of \$1,000 for the greatest percentage increase with 187.76%. Prairie Audubon also won second prize of \$500 in the numerical increase category with 92. Second prize went to Greers Ferry Audubon (Arkansas) with 74.58%. The Whittell Challenge grant membership campaign was conducted from January 1 to June 20 by National Audubon Society. Let's not stop now. In making out your Christmas list remember a membership in the Audubon Society will say "Merry Christmas" all year long.



AUDUBON GOALS

PROMOTE the conservation of wildlife and the natural environment.

HELP ESTABLISH and protect wildlife refuges, wilderness areas and natural preserves.

SUPPORT public and private measures for abatement and prevention of all forms of environmental pollution.

ENCOURAGE a national land-use policy and land-use planning.

PROTECT the public interest in our public lands.

WORK for formulation of a national energy policy stressing energy conservation.

COOPERATE with public and private agencies on international conservation.



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Please check the membership you desire:

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Supporting	<input type="checkbox"/>	\$50.00 per year	Life Member	<input type="checkbox"/>	\$1,000.00

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CHAPTER: If a chapter of the National Audubon Society exists in your vicinity, you will be assigned to that chapter unless you indicate a different choice.

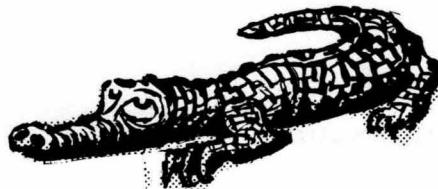
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CONSERVATION CALENDAR



NOVEMBER AND DECEMBER, 1975

November 4 Tuesday 2:30 P.M. St. Louis County Parks and Recreation Advisory Board Meeting. For information call Hot Line number 889-3200

November 4 Tuesday 7:30 P.M. Coalition for the Environment Membership Meeting on air pollution. Subject: "Carondelet - The Worst Air Pollution Spot in St. Louis?" Speakers will be Jim Clark, Co-chairman of the Coalition Air Pollution Committee, Adolph Wuenscher, Carondelet resident and Charles Humble, Research Coordinator of the Harvard Lung Study. Maury Ferguson from the Respiratory Therapy Program at Forest Park Community College, will lead the discussion.

November 4 Tuesday 7:45 P.M. ST. LOUIS AUDUBON SOCIETY PHOTOGRAPHY SECTION MEETING Clayton Federal and Loan Auditorium, Elm and Lockwood, Webster Groves. Zoo Photography Workshop.

November 4 Tuesday 8:00 P.M. Environmental Response Meeting Garden Project Center, 5166 Waterman.

November 5 Wednesday 3:00 P.M. East-West Gateway Environmental Task Force Meeting Room 2110, 720 Olive Street.

November 5 Wednesday 7:30 P.M. Sierra Club Upper Mississippi Task Force University City Public Library, 6701 Delmar. Chairman: John Cunningham 726-0176

November 6 and all following Thursdays WGNSS Birding. Call Rose Ann Bodman, 961-2583 or Helen Bowman, 531-1748 for time and place.

November 7 Friday 8:00 P.M. AUDUBON SOCIETY WILDLIFE FILM, Ethical Society, 9001 Clayton Road. Walter H. Berlet will present East Side Story - Bahamas to Quebec

November 8 Saturday 8:00 A.M. WGNSS Field Trip to Busch Wildlife Area Meet at old Shop Lake. Bring lunch.

November 8 Saturday 9:00 A.M. to 12:00 Noon ST. LOUIS AUDUBON PHOTOGRAPHY SECTION FIELD TRIP TO THE ZOO. Meet in the Zoo educational room under the Primate House.

November 10 Monday 7:30 P.M. Coalition for the Environment's Solid Waste Committee Meeting Coalition Office, 6267 Delmar.

November 10 Monday 7:30 P.M. Piasa Palisades Group, Sierra Club General Meeting First Presbyterian Church, Alton. Ill.

November 11 Tuesday 7:00 - 9:30 P.M. Terrarium Workshop Lehmann Building, Missouri Botanical Garden, Kenneth Pack, Instructor. Telephone reservations required. Cost: \$7:00 for Friends of the Garden, \$9:00 for others.

November 11 Tuesday 7:30 P.M. Coalition for the Environment's Environmental Coordinating Council Meeting, Coalition Office, 6267 Delmar.

November 11 Tuesday 8:00 P.M. Environmental Response Meeting Garden Project Center 5166 Waterman.

November 11 Tuesday 8:00 P.M. WGNSS Botany Group Meeting Webster Groves Trust Company, Lockwood and Gore Avenues. Edgar Denison, author of Missouri Wildflowers, will give a slide program on "Plants and Places in Missouri".

November 11 Tuesday 8:00 P.M. Sierra Club Energy-Resources Subcommittee 8708 Sturdy Dr. Chairman Marilyn Harlan 966-8797

A bout
Matters of
Conservation

November 14 Friday 9:30 A.M. Metro Water Study Storm Sewer Committee Meeting, 210 North 12th Street.

November 14 Friday 2:30 P.M. St. Louis County Air Pollution Appeals Board Meeting
Conference Room, 8th floor, 7900 Forsyth. (This Board acts for Industrial Hygiene and Noise Pollution also)

November 14 Friday 8:00 P.M. WGNSS Indoor Adventure St. Louis County Library, Lindbergh just south of Clayton Road. Thane Bopp, amateur astronomer and photographer looks at the firmament.

November 17 Monday 7:30 P.M. Sierra Club Eastern Missouri Group Upper Meramec Committee Meeting 512 Clark Avenue, 63119. Contact Lou Centofanti, 961-6134

November 18 Tuesday 8:00 P.M. Environmental Response Meeting Garden Project Center, 5166 Waterman.

November 18 Tuesday Sierra Club Eastern Missouri Group Wilderness Meeting. For details contact Skip Wandersee, 838-8232

November 19 Wednesday 7:30 P.M. Sierra Club Eastern Missouri Group Environmental Education Committee Meeting 745 Glenvista Pl. 63122. Chairman: Dave Bedan, 968-3568

November 20 Thursday Missouri Clean Water Commission Public Informational Hearing. Watch Newspapers for exact time and place.

November 22 Saturday 8:00 A.M. WGNSS Field Trip Destination: St. Charles County Meeting Place: Creve Coeur Lake parking lot at Marine Drive. Bring lunch.

November 25 Tuesday 8:00 P.M. Environmental Response Meeting Garden Project Center 5166 Waterman

November 25 Tuesday 7:30 P.M. Ozark Chapter, Sierra Club Meeting St. Louis County Library, Lindbergh just south of Clayton Road. Michael Bordreax, President of the Northeast Missouri Power Cooperative will speak on Coal Gasification

November 25 Tuesday 10:00 A.M. and 7:30 P.M. WGNSS Lower Plants Group Meeting
Home of Lillian Nagel and Peg Feigley, 5616 Oleatha, 481-7331

December 2 Tuesday 7:45 P.M. ST. LOUIS AUDUBON SOCIETY PHOTOGRAPHY SECTION MEETING
Clayton Federal and Loan Auditorium, Elm and Lockwood, Webster Groves. Jim Jackson and Fred Helfesrieder will present a program on woodland photography with stereo.

December 3 Wednesday 7:30 P.M. Sierra Club Upper Mississippi Task Force Meeting. University City Public Library, 6701 Delmar. Chairman: John Cunningham, 726-0176

December 9 Tuesday 8:00 P.M. WGNSS Botany Group Meeting. Webster Groves Trust Company Lockwood and Gore.

December 17 Monday 7:30 P.M. Sierra Club Eastern Missouri Group Environmental Education Committee Meeting. 745 Glenvista Pl. 63122. Chairman: Dave Bedan, 968-3568

December 20 Saturday Great Rivers Audubon Society Pere Marquette Christmas Bird Count
Contact Kathryn Arhos, 631-3090, for further information and registration.

December 21 Sunday 8:00 A.M. ST. LOUIS AUDUBON SOCIETY CHRISTMAS BIRD COUNT, Boscher-town, Highways 94 and B. Coordinator, Richard Anderson, 868-2009